## **ABSTRACT**

## TRIAZOLOPYRIMIDINE DERIVATIVES AS GLYCOGEN SYNTHASE KINASE 3 INHIBITORS

This invention concerns a compound of formula

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$$\begin{array}{c|c}
R^3 & R^1 & X \\
 & X$$

a *N*-oxide, a pharmaceutically acceptable addition salt, a quaternary amine and a stereochemically isomeric form thereof, wherein ring A represents phenyl, pyridyl, pyrimidinyl, pyridazinyl or pyrazinyl; R<sup>1</sup> represents hydrogen; aryl; formyl; C<sub>1-6</sub>alkylcarbonyl; C<sub>1-6</sub>alkylcycarbonyl; C<sub>1-6</sub>alkyls substituted with formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkyloxycarbonyl, C<sub>1-6</sub>alkylcarbonyloxy; or C<sub>1-6</sub>alkylcycarbonyl optionally substituted with C<sub>1-6</sub>alkyloxycarbonyl; X represents a direct bond; -(CH<sub>2</sub>)<sub>n3</sub>-or -(CH<sub>2</sub>)<sub>n4</sub>-X<sub>1a</sub>-X<sub>1b</sub>-; R<sup>2</sup> represents C<sub>3-7</sub>cycloalkyl; phenyl; a 4, 5, 6- or 7-membered monocyclic heterocycle containing at least one heteroatom selected from O, S or N; benzoxazolyl or a radical of formula

wherein said R<sup>2</sup> substituent may optionally be substituted; R<sup>3</sup> represents halo; hydroxy; optionally substituted C<sub>1-6</sub>alkyl; C<sub>2-6</sub>alkenyl or C<sub>2-6</sub>alkynyl, each optionally substituted; optionally substituted polyhaloC<sub>1-6</sub>alkyl; optionally substituted C<sub>1-6</sub>alkyloxy; optionally substituted polyhaloC<sub>1-6</sub>alkyloxy; C<sub>1-6</sub>alkylthio; polyhaloC<sub>1-6</sub>alkylthio; C<sub>1-6</sub>alkyl-oxycarbonyl; C<sub>1-6</sub>alkylcarbonyloxy; C<sub>1-6</sub>alkylcarbonyl; polyhaloC<sub>1-6</sub>alkylcarbonyl; eyano; carboxyl; aryloxy; arylthio; arylcarbonyl; NR<sup>6b</sup>R<sup>7b</sup>; C(=O)-NR<sup>6b</sup>R<sup>7b</sup>; -NR<sup>5</sup>-C(=O)-R<sup>5</sup>; -S(=O)<sub>n1</sub>-R<sup>8a</sup>; -NR<sup>5</sup>-S(=O)<sub>n1</sub>-R<sup>8a</sup>; -S-CN; -NR<sup>5</sup>-CN; R<sup>4</sup> represents hydrogen; halo; hydroxy; optionally substituted C<sub>1-4</sub>alkyl; C<sub>2-4</sub>alkenyl or C<sub>2-4</sub>alkynyl, each optionally substituted; polyhaloC<sub>1-3</sub>alkyl; optionally substituted C<sub>1-4</sub>alkyloxy; polyhalo-C<sub>1-3</sub>alkyloxy; C<sub>1-4</sub>alkylthio; polyhaloC<sub>1-3</sub>alkylthio; C<sub>1-4</sub>alkyloxycarbonyl; C<sub>1-4</sub>alkylcarbonyloxy; C<sub>1-4</sub>alkylcarbonyl; polyhaloC<sub>1-4</sub>alkylcarbonyl; nitro; cyano; carboxyl; NR<sup>10</sup>R<sup>11</sup>; C(=O)NR<sup>10</sup>R<sup>11</sup>; -NR<sup>5</sup>-C(=O)-NR<sup>10</sup>R<sup>11</sup>; -NR<sup>5</sup>-C(=O)-R<sup>5</sup>; -S(=O)<sub>n1</sub>-R<sup>12</sup>; -NR<sup>5</sup>-S(=O)<sub>n1</sub>-R<sup>12</sup>; -S-CN; -NR<sup>5</sup>-CN; their use, pharmaceutical compositions comprising them and processes for their preparation.